

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

INTERNATIONAL BUSINESS
MACHINES CORPORATION,

Plaintiff,

v.

GROUPON, INC.,

Defendant.

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REDACTED PUBLIC VERSION

C.A. No. 16-122-LPS-CJB

David E. Moore, Bindu A. Palapura, Stephanie E. O'Byrne, POTTER ANDERSON &
CORROON LLP, Wilmington, DE

John M. Desmarais, Karim Z. Oussayef, Laurie N. Stempler, Robert C. Harrits, Brian D. Matty,
Michael Matulewicz-Crowley, DESMARAIS LLP, New York, NY

Attorneys for Plaintiff International Business Machines Corporation

John G. Day, Andrew C. Mayo, ASHBY & GEDDES, Wilmington, DE

J. David Hadden, Saina S. Shamilov, Phillip J. Haack, Sapna Mehta, FENWICK & WEST LLP,
Mountain View, CA

Attorneys for Defendant Groupon, Inc.

MEMORANDUM OPINION

June 18, 2018
Wilmington, Delaware



STARK, U.S. District Judge:

Plaintiff International Business Machines Corporation (“IBM”) filed suit against Defendant Groupon, Inc. (“Groupon”) on March 2, 2016, alleging infringement of U.S. Patent Nos. 5,796,967; 7,072,849; 5,961,601; and 7,631,346.

Presently before the Court are the parties’ summary judgment motions. (D.I. 208, 211, 214, 219, 226) Briefing was completed on March 28, 2018. The Court heard oral argument on April 24, 2018. (*See* D.I. 294 (“Tr.”)) In a prior opinion, the Court addressed the parties’ *Daubert* motions. (*See* D.I. 303) In this opinion, the Court addresses the parties’ summary judgment motions.

For the reasons stated below, the Court will deny (a) IBM’s motion for summary judgment (“MSJ”) of no invalidity of the asserted claims of U.S. Patent No. 5,961,601 in view of Amazon and no invalidity of claims 9, 10, 58, and 59 of the ‘601 patent (D.I. 208), (b) IBM’s motion for summary judgment of no anticipation by Morris and no obviousness in view of Morris and Xerox Star for the asserted claims of U.S. Patent No. 5,796,967 (D.I. 219), and (c) Groupon’s motion for summary judgment (D.I. 226); and grant in part and deny in part (a) IBM’s motion for summary judgment of no affirmative defenses of license, exhaustion, first sale, estoppel, covenant not to sue, and release (D.I. 211) and (b) IBM’s motion for summary judgment of no anticipation by HyperCard and no obviousness in view of HyperCard and Terry for the asserted claims of the ‘967 patent (D.I. 214).

I. LEGAL STANDARDS

Pursuant to Rule 56(a) of the Federal Rules of Civil Procedure, “[t]he court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact

and the movant is entitled to judgment as a matter of law.” The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *See Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 585-86 (1986). An assertion that a fact cannot be – or, alternatively, is – genuinely disputed must be supported either by citing to “particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials,” or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then “come forward with specific facts showing that there is a genuine issue for trial.” *Matsushita*, 475 U.S. at 587 (internal quotation marks omitted). The Court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the nonmoving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita*, 475 U.S. at 586; *see also Podobnik v. U.S. Postal Serv.*, 409 F.3d 584, 594 (3d Cir. 2005) (stating that party opposing summary judgment “must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue”) (internal quotation marks omitted). The “mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment;” a factual dispute is genuine only where “the evidence is such that a reasonable jury could return a verdict for the nonmoving

party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986). “If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Id.* at 249-50 (internal citations omitted); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated “against a party who fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial”). Thus, the “mere existence of a scintilla of evidence” in support of the nonmoving party’s position is insufficient to defeat a motion for summary judgment; there must be “evidence on which the jury could reasonably find” for the nonmoving party. *Anderson*, 477 U.S. at 252.

II. DISCUSSION

A. IBM’s MSJ of No Invalidity of ’601 Claims in view of Amazon, and No Invalidity of Claims 9, 10, 58, and 59 of ’601 Patent

The ’601 patent, filed on June 7, 1996, is entitled “Preserving State Information in a Continuing Conversation Between a Client and Server Networked via a Stateless Protocol.” Groupon contends the 1995 version of the Amazon website (www.amazon.com) anticipates asserted independent claims 1 and 51 of the ’601 patent, from which all asserted dependent claims depend. Claims 1 and 51 require “identifying all continuations in an output from said service” and “recursively embedding the state information in all identified communications.”

According to Groupon, in 1995, Amazon generated webpages using [REDACTED] files that had URL placeholders for unique session identifiers (“session IDs”) assigned to each customer visiting Amazon’s website. Groupon contends that Amazon anticipates the ’601 patent because the [REDACTED] that “identified all continuations” by

locating each session ID placeholder in a [REDACTED] file and “recursively embedded state information” by replacing each placeholder with a session ID.

IBM seeks summary judgment of no invalidity of the '601 patent in view of Amazon. IBM contends that, because no 1995 [REDACTED] files have been produced, Groupon has no evidence that the 1995 Amazon website met the limitations of claims 1 and 51. (*See* D.I. 209 at 7-9) According to IBM, it is impossible to know what the [REDACTED] looked like, how many continuations existed, and/or which continuations were embedded with state information. (*See id.* at 8) Moreover, IBM contends that Paul Davis – Amazon’s second employee, who was also one of two developers of Amazon’s original website and in this litigation is a Groupon witness – acknowledged that some links in the 1995 [REDACTED] were *not* embedded with state information. (*See id.* at 9) Even if Groupon could rely on the 1996 Amazon [REDACTED] IBM asserts that those [REDACTED] do not meet the limitations of the asserted claims because not all continuations embed state information. (*See id.* at 10-11) IBM further seeks summary judgment that dependent claims 9, 10, 58, and 59 are not invalid in view of any prior art asserted by Groupon because Groupon’s expert, Dr. Jon Weissman, attributes one step in each of three prior art references (Unleashed, Amazon, and Spinning the Web) to four different method steps – “identifying,” “embedding,” “filtering,” and “adding.” (*See id.* at 11-12)¹

Groupon responds that the 1995 [REDACTED] are not necessary for an invalidity analysis because Mr. Davis, the developer of Amazon’s system, testified that the 1995 [REDACTED] were

¹IBM also initially sought summary judgment that the '601 patent was not obvious in view of Amazon. (*See* D.I. 209 at 11) During oral argument, however, the parties agreed there was no pending dispute as to obviousness relating to independent claims 1 and 51 or dependent claims 9, 10, 58, and 59. (*See* Tr. at 18-20)

“significantly similar” to the 1996 [REDACTED] which were produced, and that the 1996 [REDACTED] are “perfectly illustrative examples of what the [REDACTED] looked like in 1995.” (D.I. 247 at 5)

According to Groupon, therefore, it is up to the jury to assess Mr. Davis’ testimony and Dr. Weissman’s analysis in determining whether Amazon anticipated the ’601 patent. Even ignoring the 1995 [REDACTED] Groupon contends that whether the 1996 [REDACTED] meet all limitations of the asserted claims is a fact question for the jury, as the only links that did not embed state were not continuations, since they “do not create a request to the web server” as required by the claim construction. (*Id.* at 7-8) Finally, regarding the identified dependent claims, Groupon contends that Dr. Weissman explained how each reference disclosed the various claim limitations by, e.g., employing conditional if-then statements that either filter or add hyperlinks. (*See id.* at 11-13)

During discovery, Groupon produced four code repositories labeled with four different dates: June 1995, July 1995, June 1996, and July 1996. It is undisputed that [REDACTED] files from 1995 were never produced, as Amazon did not store [REDACTED] in its source control system at that time. (*See* D.I. 210 Ex. A at 292 (Dr. Jon Weissman stating, “I understand that the HTML [REDACTED] were not stored in Amazon’s source control system in 1995.”); *see also id.* Ex. B at 402-03 (Dr. Weissman explaining, “[I]n 1995, the archive was not recording the [REDACTED] files, and that did not happen until 1996.”); *id.* Ex. C at 134-35 (Groupon’s expert and former Amazon employee and developer, Paul Davis, acknowledging that [REDACTED] did not become part of repository source code until 1996); D.I. 209 at 8 (IBM stating, “Dr. Weissman does not cite any [REDACTED] files from 1995. Nor could he, as the code repositories he reviewed do not contain any Amazon [REDACTED] from 1995.”); Tr. at 7)

While the 1995 [REDACTED] have not been produced, a reasonable factfinder taking the

evidence in the light most favorable to Groupon – including Dr. Weissman’s opinion, the 1996 [REDACTED] files, the 1995 source code, and Mr. Davis’ testimony – could find clear and convincing evidence of anticipation. It is for the jury to assess Mr. Davis’ credibility, including his statement that “there were some . . . links that did not have . . . state ID in them” in 1995. (D.I. 210 Ex. C at 138; *see also id.* at 139-40) The record reveals genuine disputes of material fact, including what those links Mr. Davis was referring to were and whether they are continuations under the Court’s claim construction.

The Court further finds Groupon’s invalidity theory of dependent claims 9, 10, 58, and 59 is one that a reasonable jury could accept. Simply because one program in each prior art reference may execute four different claim steps does not preclude a finding of invalidity. It is for the jury to assess Dr. Weissman’s credibility and whether to accept his opinion.

Accordingly, IBM’s motion will be denied.

B. IBM’s MSJ on Affirmative Defenses of License, Exhaustion, First Sale, Estoppel, Covenant Not to Sue, and Release

IBM seeks summary judgment on Groupon’s affirmative defenses, contending Groupon has failed to adduce evidence to support each of the essential elements of any of these defenses. (D.I. 212 at 1) Regarding Groupon’s patent exhaustion defense, IBM contends that while Groupon identified third party agreements between IBM and four third parties – [REDACTED] (collectively, the “Third Party Agreements”) – Groupon only mentioned these agreements in conjunction with the ’346 patent and failed to explain how any of the Third Party Agreements apply to the other asserted patents. (*See id.* at 3-4; D.I. 273 at 1) Moreover, IBM contends Groupon failed to explain how any third party articles specifically,

— infringe or substantially embody the claims of the '346 patent. (D.I. 212 at 3, 5) As related to Groupon's license defense, IBM contends that Groupon has not identified any "affirmative grant" to it from IBM to make, use, or sell products or instrumentalities that practice the claimed inventions of the asserted patents. (*Id.* at 4) IBM also asserts that Groupon did not plead or provide any theories of full compensation, estoppel, covenant not to sue, or release. (*Id.* at 6)

Groupon responds that IBM's agreements with [REDACTED] include the '967 and '849 patents, IBM's agreement with [REDACTED] includes the '346, '849, and '967 patents, and IBM's agreement with [REDACTED] includes all asserted patents. (See D.I. 250 at 1-2) Groupon contends it identified each of these agreements in its interrogatory responses, thereby putting IBM on notice of its defenses. (*Id.* at 5) According to Groupon, the [REDACTED] licenses bar IBM's claims of infringement of the '346 patent under the doctrines of patent exhaustion and license because both licenses "cover and authorize the single sign-on APIs provided by [REDACTED] authorizing their use in a way that may practice the '346 patent by not imposing any such restrictions." (*Id.* at 7) Groupon asserts that IBM's expert cites extensively to [REDACTED] APIs in his infringement analysis for the '346 patent, mapping the essential elements of the asserted claims to these APIs, and, thus, bases infringement on Groupon's system creating user accounts through the [REDACTED] (*Id.*) In addition, Groupon contends the [REDACTED] licenses bar IBM's claims of infringement of the '967 and '849 patents, as "[c]ach license broadly covers all instrumentalities that handle any information or data in any way for any purpose; thus extending to web browsers and mobile operating systems." (*Id.* at 9)

The record reveals genuine disputes of material fact with respect to Groupon's license and patent exhaustion defenses as related to the '346 patent. Groupon sufficiently put IBM on notice of these defenses in its interrogatory responses and supplements to them. (*See* D.I. 253 Ex. 6 at 15-20) A reasonable juror, taking the evidence in the light most favorable to Groupon, could accept Groupon's license and patent exhaustion defenses.

However, Groupon did not mention the [REDACTED] license or the '849, '967, and '601 patents in its interrogatory responses and, therefore, cannot properly assert such defenses now.² The Court will, therefore, grant IBM's motion as it relates to defenses based on an agreement with [REDACTED] and any license or exhaustion defenses based on any agreement as related to the '849, '967, and '601 patents.

Moreover, as Groupon did not plead or provide any theories of full compensation, estoppel, covenant not to sue, or release, the Court will grant IBM's motion on those defenses as well.³

**C. IBM's MSJ of No Anticipation by HyperCard and No Obviousness
in view of HyperCard and Terry for the Asserted Claims of '967 Patent**

²Groupon only implicitly mentioned the '601 patent in its responsive brief to IBM's motion for summary judgment, broadly asserting that "[a]ll of the asserted patents are included" in IBM's agreement with [REDACTED] without any further discussion of the '601 patent. (D.I. 250 at 2-3) Moreover, in the parties' joint proposed pretrial order, Groupon asserts defenses of license and patent exhaustion only with respect to the '346 patent and omits reference to any other asserted patent as related to these defenses. (*See, e.g.*, D.I. 305 at 5; *see also id.* Ex. B at 5, 9; *id.* Ex. D at 26-27)

³To the extent Groupon contends IBM's motion should be denied here because of the Court's decision in *IBM v. Priceline* (C.A. No. 15-137 (hereinafter "*Priceline*")), the Court agrees with IBM that the two cases rely on different evidence and relate to different accused products. (*See* D.I. 273 at 1) The Court's decision denying IBM's motion in *Priceline* is unrelated to the Court's decision here.

IBM seeks summary judgment of no anticipation of the asserted claims of the '967 patent by the Apple HyperCard system ("HyperCard") and no obviousness in view of HyperCard and Terry,⁴ contending that Groupon has failed to show that HyperCard connected to a network was publicly used or known prior to July 15, 1988, the effective filing date of the '967 patent, or that a POSA would have been motivated to combine HyperCard with Terry. (D.I. 215 at 1)

Groupon contends that use of the HyperCard system on a computer network was described in several publications between 1987 and 1988 and that records from the Library of Congress Copyright Office Catalog establish publication dates for each of those references that pre-date the '967 patent, including: (1) the First Edition Goodman Handbook published in either August or September 1987; (2) the Apple Macintosh HyperCard User's Guide published in 1987; (3) the Danny Goodman's HyperCard Developer's Guide ("Developer's Guide"), published on June 1, 1988; and (4) HyperCard Made Easy, published on July 8, 1988. (D.I. 252 at 1-2 & 2 n.4) Groupon also asserts the '967 patent is obvious in light of HyperCard and Terry.

IBM challenges the publication date of each of Groupon's HyperCard references. First, while Groupon asserts HyperCard Made Easy was published on July 8, 1988, IBM contends that date is the publication date of the *first edition* of HyperCard Made Easy -- but Dr. Weissman relied on the *second edition*, which was not published until September 30, 1988, *after* the '967 patent's filing date. (D.I. 277 at 1) The Handbook Dr. Weissman cites, according to IBM, has a publication date of October 1988. (D.I. 215 at 7) In addition, IBM points out this Court already determined in the *Priceline* litigation that the First Edition Goodman Handbook is not enabling

⁴Douglas Terry, "Caching Hints in Distributed Systems," 13 J. IEEE Trans. on Software Engineering 48, January 1987.

and is “forward looking.” (*Id.*) As to the Developer’s Guide, IBM contends Dr. Weissman did not cite this reference “for any limitation, let alone the ‘network’ limitation,” and his failure to do so precluded IBM’s expert from rebutting Groupon’s theory – so allowing Dr. Weissman to present this reference greatly prejudices IBM. (*See* D.I. 277 at 2 & n.3) IBM contests Groupon’s late reliance on screen shots from the Library of Congress Copyright Office website, insisting that establishing a publication date based on those screen shots would amount to reliance on inadmissible hearsay. (*See id.* at 2) Even if admissible, IBM contends the date found on the Copyright Office website for the Developer Guide’s website (June 1, 1988) conflicts with the date listed on the reference itself (July 1988), and a publication date of July 1988 does not prove that the reference was publicly available prior to July 15, 1988. (*See id.* at 2 & n.4)

Regarding obviousness, IBM contends that because there is no evidence that HyperCard was ever on a network prior to July 15, 1988, and because Dr. Weissman conceded that in order to combine Terry and HyperCard, HyperCard would have to be on a computer network, summary judgment must be granted. (*See* D.I. 215 at 8-9) Moreover, as Dr. Weissman did not rely solely on HyperCard in his obviousness analysis in his Opening Report, but instead raised this argument for the first time in his reply, IBM contends the Court should not consider it now. (D.I. 277 at 4) Groupon responds that HyperCard alone renders the ’967 patent obvious and that multiple factual determinations exist surrounding, *inter alia*, what HyperCard and Terry disclose and whether there is a motivation to combine them, and therefore, summary judgment should be denied. (D.I. 252 at 4-6)

With respect to anticipation, the Court agrees with IBM. As an initial matter, any prior art reference or invalidity theory that Dr. Weissman did not disclose in his reports, including the

Developer's Guide reference and an obviousness theory based on HyperCard alone, cannot be asserted now. (See, e.g., D.I. 278 Ex. 4 at 22-70; see *id.* Ex. 5 at 6-19)⁵ In his Opening Report, Dr. Weissman bases his anticipation theory on two references: the October 1988 Goodman Handbook (Second Edition) and HyperCard Made Easy.⁶ As the October 1988 handbook post-dates the '967 filing date, Dr. Weissman attempts to rely on the first edition of the handbook – but, as the Court found in *Priceline*, the first edition “only addressed what *could* be done in the future and never discussed any of the configurations that [the defendants' expert] relies on or identifies as a specific network to which the system could connect.” *Int'l Bus. Machines Corp. v. Priceline Grp. Inc.*, 271 F. Supp. 3d 667 (D. Del. 2017). Accordingly, neither edition may be used to anticipate the '967 patent. Regarding HyperCard Made Easy, the Court agrees with IBM that Groupon must rely on the date of the same edition relied on by Dr. Weissman (the second edition), which post-dates the '967 patent. As each of Dr. Weissman's anticipation references post-date the '967 patent, no reasonable juror could find the patent to be anticipated, so the Court will grant IBM's motion for summary judgment of no anticipation based on HyperCard.

However, the Court will deny IBM's motion as to obviousness. While Groupon was unable to present a HyperCard reference pre-dating the '967 patent that disclosed the system connected to a network, IBM has not proven that a POSA would not have been motivated to combine the First Edition of HyperCard – which discloses that the software is capable of working

⁵While Dr. Weissman listed the Developer's Guide in his report as a potential reference, he did not cite to it for any portion of his analysis of anticipation or obviousness. (See D.I. 278 Ex. 4 at 21; see also Tr. at 111-12)

⁶Dr. Weissman also cites to the Apple Macintosh HyperCard User's Guide, but it is undisputed that the User's Guide does not disclose a network; and Dr. Weissman does not rely on the User's Guide for this claim element. (See D.I. 278 Ex. 4 at 21, 23-29)

on a network – with Terry, which discloses caching in distributed systems on a network. Dr. Weissman admitted that HyperCard would have to be on a computer network to combine HyperCard and Terry, and there is a genuine dispute of material fact as to whether a POSA would know, or be led, to combine these two references on a network. (See D.I. 216 Ex. 6 at 318-22) Thus, the Court will deny summary judgment of no obviousness in view of HyperCard and Terry for the asserted claims of the '967 patent.

D. IBM's MSJ of No Anticipation by Morris and No Obviousness in View of Morris and Xerox Star for the Asserted Claims of '967 Patent

IBM seeks summary judgment of no anticipation by Morris⁷ and no obviousness in view of Morris and the Xerox Star system⁸ for the asserted claims of the '967 patent. (See D.I. 220) Independent claim 1 of the '967 patent requires, *inter alia*, “a second partition for presenting a plurality of command functions,” the partition being “constructed from objects, the objects being retrieved from the objects stored at the respective reception system, or if unavailable . . . , then from the network.” Dependent claim 2 further requires “the data structure of the objects includes a header.” Dependent claim 4 requires the objects to have “a storage control parameter in their respective headers.”

IBM contends Morris does not anticipate the '967 patent because Groupon's expert, Dr. Weissman, failed to show how Morris meets the “second partition” limitation of claim 1, the “header” limitation of dependent claim 2, or the “storage control parameter” limitation of dependent claim 4. (See D.I. 220 at 5-8) While Dr. Weissman identified “objects” in the

⁷James Morris, et al., “Andrew: A Distributed Personal Computing Environment.”

⁸Two references by David Smith together disclose the Xerox Star system: *Designing the Star User Interface* and *The Star User Interface: An Overview*. (See D.I. 220 at 1 n.2)

“second partition” in Morris, IBM contends the “objects” to which Dr. Weissman points (1) do not meet the Court’s construction of “object,” as there is no evidence that the files are “data structures” and (2) do not meet the requirement that they be retrieved from the reception system or, if not present at the system, from the network. (*See id.* at 6-7) For the “header” limitation, Dr. Weissman points to “i-nodes” allegedly inherently disclosed by Morris, but IBM contends the i-nodes are stored separately from the data, not included within the objects and, thus, cannot satisfy the “header” element. (*See id.* at 7; *see also* Tr. at 60-61) Moreover, IBM contends Dr. Weissman failed to cite any evidence showing that Morris necessarily includes i-nodes to satisfy inherent anticipation. (*See* D.I. 220 at 7; Tr. at 61) IBM further contends Morris does not meet the “storage control parameters” element because Dr. Weissman only points to parameters *outside* the contents of the file and does not opine on how file path names or i-nodes meet the Court’s construction of “storage control parameter.” (*See id.* at 8) Accordingly, IBM contends Morris alone does not anticipate the ’967 patent. IBM similarly contends the same limitations are missing from Xerox. (*See id.* at 10-12) As both Morris and Xerox lack these limitations, and because Dr. Weissman did not opine that any missing limitations would have been obvious to a POSA, IBM contends the combination of Morris and Xerox Star does not render the ’967 patent obvious. (*See id.* at 9-12; *see also* Tr. at 63)

Groupon responds that Dr. Weissman identified evidence in Morris of each of the limitations IBM argues is missing. (*See* D.I. 251 at 3-6) According to Groupon, IBM reads additional limitations into the claims by requiring the commands within the second partitions be created from objects and that the headers and storage control parameters be contained within the objects. (*See id.* at 4-6; *see also* Tr. at 65 (“[T]he claim language requires the partitions are

constructed from objects. There is no requirement that the other content within the partition be constructed from objects.”)) In addition, for the “header” element, Groupon contends that Dr. Weissman clearly stated that a POSA would understand that i-nodes were present in the cited Berkeley UNIX file system, a component of the Andrew system disclosed in Morris. (*See id.* at 5; Tr. at 66) Moreover, Groupon contends that “[f]iles are data objects” and “[i]-nodes are part of the files” that include metadata attributes – “[t]hey’re the header part of the file,” thus satisfying the elements of dependent claim 2. (Tr. at 67) Groupon also contends that Morris inherently discloses that “every file in the system may be locally cached or retrieved from the network.” (*Id.*) Regarding obviousness, Groupon contends that because Morris discloses each of these limitations and specifically cites the Xerox Star system, a POSA would be motivated to combine the references. (*See id.* at 7-8) Groupon also alleges that IBM’s nonobviousness arguments – that if neither Morris nor Xerox Star disclose a limitation, the combination thereof cannot render such a limitation obvious – are contrary to law, as the law only asks whether the “subject matter as a whole” would have been obvious, not whether individual elements of the claims are present in the prior art. (*Id.*)

The Court finds genuine disputes of material fact preclude summary judgment here. Groupon’s anticipation theory – that the files of the distributed Andrew file system described in Morris are objects (that contain data structures called i-nodes) used to create the second partition (*see* D.I. 251 at 3-4) – and IBM’s attack on it, raise various factual questions regarding, *inter alia*, the difference between objects and files, the formation of second partitions, and the presence of certain disclosures (i-nodes and local storage) purportedly inherent in Morris. The jury will be permitted to evaluate the evidence and the parties’ witnesses’ credibility in

answering each of these questions. *See Koito Mfg. Co., Ltd. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1149 (Fed. Cir. 2004) (“Anticipation is a factual determination that is reviewed for substantial evidence when decided by a jury.”); *Rapoport v. Dement*, 254 F.3d 1053, 1057 (Fed. Cir. 2001) (“Whether a claim limitation is inherent in a prior art reference is a factual issue on which evidence may be introduced.”). These genuine disputes of material fact also preclude a grant of summary judgment of nonobviousness: a reasonable jury taking the evidence in the light most favorable to Groupon could find clear and convincing evidence of obviousness. *See Ericsson Inc. v. Intellectual Ventures I LLC*, 890 F.3d 1336, 1338 (Fed. Cir. 2018) (“‘Obviousness’ is a matter of law based on underlying factual findings.”). Thus, the Court will deny IBM’s motion.

E. Groupon’s Motion for Summary Judgment

1. Non-Infringement of ‘967 and ‘849 Patents

Groupon seeks summary judgment of non-infringement of the ‘967 and ‘849 patents. According to Groupon, its website does not satisfy the “first partition” or “second partition” requirements of the ‘967 patent because it does not generate an area distinct from the applications it is to present and it does not generate a second area for presenting command functions concurrently with the first area. (*See* D.I. 227 at 7-8) Groupon also contends that neither Groupon’s website nor its mobile applications infringe the ‘849 patent because, similar to the Court’s ruling in *Priceline*, Groupon does not actually perform or direct and control the performance of the “storing” steps of the claims. (*See id.* at 10)⁹

⁹Groupon further contends that IBM’s doctrine of equivalents theory was belatedly disclosed in IBM’s expert’s reply report and, therefore, should be stricken. (*See id.* at 4 n.1; *see also id.* at 10

IBM responds that Groupon concurrently generates areas for applications, command functions, and advertising through HTML “div” commands. (*See* D.I. 248 at 2) According to IBM, Groupon’s contention that the first and second areas must be fixed, non-overlapping areas was already rejected by the Court during claim construction. (*See id.* at 3-4; *see also* Tr. at 86) In addition, IBM contends that the claim language only requires the first and second partitions to be *generated* concurrently, not displayed concurrently, and Groupon does not dispute that it generates the areas concurrently. (*See* D.I. 248 at 7) While this Court granted summary judgment of non-infringement of the ‘849 patent in *Priceline*, summary judgment of noninfringement here, in IBM’s view, is precluded by material fact questions, including whether Groupon controls the storing step for its website when caching is enabled or during testing of its website. (*See id.* at 9-11)

The Court agrees with IBM that factual disputes preclude granting summary judgment to Groupon. The parties’ experts each apply the Court’s claim construction and disagree on where, if at all, the elements are being practiced. The Court’s decision in *Priceline* does not determine the outcome here – this case presents different facts surrounding the testing of the accused systems and whether caching can be disabled in Groupon’s mobile applications. A reasonable jury taking the evidence in the light most favorable to IBM could find the performance of the “storing” step is in Groupon’s control. (*See* Tr. at 91- 93) The Court will, therefore, deny summary judgment.

n.5) IBM does not appear to dispute that its doctrine of equivalents theory does not apply to the ‘967 and ‘849 patents.

2. Non-Infringement of '601 Patent

Groupon seeks summary judgment of non-infringement of the '601 patent, contending “there is no dispute regarding how Groupon generates the accused webpages and mobile application content” and that Groupon’s architecture operates in a different way than the claims of the '601 patent. (D.I. 227 at 19) In Groupon’s view, while the '601 patent preserves state by recursively embedding state information in all continuations in an output, Groupon’s systems utilize cookies and mustache templates that do not meet the embedding or detecting requirements of the asserted claims. (*See id.* at 17-20, 21-23) In addition, according to Groupon, IBM maps the claimed “service” – “one or more of data and programs which the client may request” – to multiple Groupon components: it is the accused webpage the client requested for the preamble and detecting step, and the Layout Service for the “identifying all continuations” step. (D.I. 279 at 9-10) Groupon further faults IBM’s doctrine of equivalents theory – which alleges that embedding a subset of continuations is substantially the same as embedding “all continuations” – for “defeat[ing] the entire purpose of the claims.” (*Id.* at 27)

IBM responds that its expert consistently and reasonably mapped the “service” element to Groupon’s webpages, asserting that the user requests a webpage and may also thereby be found to request the components of that webpage. (*See* D.I. 248 at 29-30; *see also* Tr. at 39) Therefore, when the user requests the webpage, “one of the things they’re requesting is the Layout Service.” (Tr. at 40) Regarding Groupon’s mobile applications, IBM contends Groupon “rel[ies] on an incorrect reading of the claims that excludes any situation in which embedding occurs at the client.” (D.I. 248 at 28) According to IBM, Groupon’s mobile applications embed state information by turning JSON data for different deal options into clickable elements. (*See id.*) As

to the doctrine of equivalents, IBM contends that “when the continuations are viewed in terms of a conversation that facilitates a transaction,” embedding state information only in continuations that further the transaction may be equivalent to embedding state information in all continuations. (D.I. 248 at 33)

The Court concludes that genuine disputes of material fact preclude summary judgment. As the parties acknowledge, there is no dispute as to how Groupon operates its webpages and mobile applications. Instead, the parties dispute how to map specific steps in Groupon’s systems to the asserted claims; each side finds support in its expert’s opinion based on application of the Court’s constructions. For example, reasonable jurors could find that users of the Groupon accused systems inherently do request backend services or that they do not. More broadly, a reasonable factfinder could find infringement – literally or by equivalents – or could not. Accordingly, the Court will deny summary judgment.

3. Non-Infringement of ’346 Patent

Groupon seeks summary judgment of non-infringement of the ’346 patent, contending that certain claims were found unpatentable by the Patent Trial and Appeal Board and the remaining claims – dependent claims 2, 5, 8, and 10 – are not satisfied by Groupon’s website and mobile applications. (D.I. 227 at 28-29)¹⁶ Groupon contends it does not perform the step of “creating an alias identifier for the user at the first system after triggering the single-sign-on operation,” as required by claim 2. (*Id.* at 30) Instead, according to Groupon, “it is Facebook or Google that generates the alleged alias identifier associated with the user and provides it to

¹⁶Claims 1, 3, 12-15, and 18 were found unpatentable by the PTAB. IBM has appealed this decision to the Federal Circuit. (D.I. 227 at 28 & n.9)

Groupon in the form of an authentication token.” (*Id.*)¹¹ Groupon further contends it does not send a request “in response to a determination at the second system that the second system does not have sufficient user attribute information to complete creation of a user account for the user at the second system,” as required by claims 5, 8, and 10. (*See id.* at 31) Instead, Groupon contends, its system “*always* request[s] the same set [of] user information after receiving the initial authentication token from either Facebook or Google, without evaluating whether the information provided by that token is sufficient to create a user account.” (*Id.* at 32)

IBM responds that claims found unpatentable by the PTAB are still involved in this litigation, as the PTAB has not yet issued a trial certificate cancelling those claims and IBM’s appeal from the PTAB decision is pending at the Federal Circuit. (*See* D.I. 248 at 34) As Groupon has not challenged any other aspect of those claims, IBM contends summary judgment should be denied as to those claims. (*See id.*) Regarding dependent claim 2, IBM agrees that Facebook (or Google) generates an alias identifier for the user, but contends that Groupon also creates an alias identifier through its “define an ‘_id’” variable, as explained by IBM’s expert, Dr. Schmidt. (*See id.* at 34-35) As to dependent claims 5, 8, and 10, IBM contends that Groupon’s corporate representative explained that Groupon does request user attribute information based on a determination that the access token does not have sufficient information, negating Groupon’s argument that such a request is not sent in response to a determination that insufficient information exists from the Facebook or Google token. (*See id.* at 36)

¹¹IBM does not dispute that it has not alleged joint infringement of the ‘346 patent. (*See* D.I. 227 at 31 n.12)

The Court agrees with IBM. As IBM's appeal from the PTAB ruling is not complete, IBM retains an enforceable property interest in the claims held unpatentable by the PTAB. Moreover, the record reveals genuine disputes of material fact surrounding whether Groupon creates an alias identifier, as required by dependent claim 2, including whether Groupon creates such an identifier or whether it merely stores the identifier created by Facebook or Google, and whether claim 2 requires the alias to be created at the first system.¹² There are also genuine disputes of material fact with respect to infringement of dependent claims 5, 8, and 10, including whether Groupon requests additional information in response to receiving insufficient information to create a user account from Facebook or Google. Accordingly, the Court will deny summary judgment of non-infringement of the '346 patent.

4. Priority Date of '601 Patent

Groupon seeks summary judgment that the '601 patent is not entitled to a priority date earlier than its filing date. (D.I. 227 at 34) According to Groupon, IBM relies on deposition testimony of the patent's sole inventor, without any independent corroborating evidence to prove conception, and fails to show continuous diligence in reducing the invention to practice or actual reduction to practice prior to the patent filing date. (*See id.* at 34-37) Thus, in Groupon's view, IBM cannot meet its burden to establish an earlier priority date.

IBM contends that it produced source code files showing that the '601 patent inventor actually reduced the invention to practice prior to the patent filing date. (D.I. 248 at 37-38) The

¹²At this point the Court does not believe it needs to engage in any further claim construction related to the parties' dispute. Should one or both parties feel otherwise, they should raise the issue at the pretrial conference and/or during trial (prior to the Court providing the jury final jury instructions).

source code files, IBM contends, contain metadata with dates of creation, last modified dates, and dates listed in the body of the files themselves, all of which are “months before the filing date of the ’601 patent.” (*Id.* at 38)

The Court agrees with IBM that evidence of actual reduction to practice renders irrelevant Groupon’s arguments surrounding conception and diligence. *See Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1037-38 (Fed. Cir. 2001). IBM has presented evidence, including source code and expert testimony, from which a reasonable factfinder could find that the ’601 patent is entitled to an earlier priority date. Hence, Groupon’s motion for summary judgment will be denied. *See Kenexa Brassring, Inc. v. Taleo Corp.*, 751 F. Supp. 2d 735, 759-61 (D. Del. 2010).

III. CONCLUSION

For the reasons stated above, the Court will deny (a) IBM’s motion for summary judgment of no invalidity of the asserted claims of U.S. Patent No. 5,961,601 in view of Amazon and no invalidity of claims 9, 10, 58, and 59 of the ’601 patent (D.I. 208), (b) IBM’s motion for summary judgment of no anticipation by Morris and no obviousness in view of Morris and Xerox Star for the asserted claims of U.S. Patent No. 5,796,967 (D.I. 219), and © Groupon’s motion for summary judgment (D.I. 226). The Court will also grant in part and deny in part (a) IBM’s motion for summary judgment of no affirmative defenses of license, exhaustion, first sale, estoppel, covenant not to sue, and release (D.I. 211) as well as (b) IBM’s motion for summary judgment of no anticipation by HyperCard and no obviousness in view of HyperCard and Terry for the asserted claims of U.S. Patent No. 5,796,967 (D.I. 214).